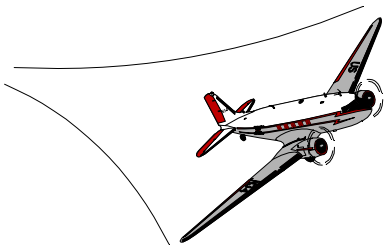
SPECIAL AIRWORTHINESS INFORMATION BULLETIN



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Federal Aviation Administration

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We post SAIBs on the internet at "av-info.faa.gov"

This is information only. Recommendations are not mandatory.

Introduction:
This Special Airworthiness Information Bulletin (SAIB) advises and alerts you, an owner or operator of Chaparral Motors, Inc. (Great Lakes) Model 2T-1A and 2T-1A-2 to review Service Bulletins (SBs) listed below:

- Great Lakes Service Bulletins #4, "Tail Wire Rigging", dated July 20, 1977
- "Correction of Service Bulletin #4" (#4a), dated June 16, 1978

Background - *Tail Wire Rigging*
During recent maintenance and repair of both horizontal stabilizers, an operator found cracks on the front spar tubes of a Chaparral Motors, Inc. (Great Lakes) Model 2T-1A-2 airplane. This type of cracking has been found on 10 separate occasions and these cracks are noted as usually appearing at the interconnect fittings. Since there is no requirement to disassemble the horizontal stabilizer while conducting a spar inspection, cracks may exist and go undetected.

Great Lakes released SBs #4 and #4a because of incidents where field adjustments of the fin brace wires were causing different tensions between wires on the same side of the fin. This could cause excessive loads that lead to the reported cracks. Further damage could result, if these cracks are not repaired.

Recommendation - *Tail Wire Rigging*
The FAA recommends that you remove the horizontal stabilizer from the aircraft and inspect the inside of the front spar tube with a flashlight and small mirror at your next annual inspection. We also recommend you pay particular attention to the rivet area. When reinstalling the stabilizer, you should ensure that brace wires are properly rigged as noted in SBs #4 and #4a.

Background - *Engine Mounts*
During periodic inspection, an operator found cracks on the engine mounts, (GLAC part number 50100), on three Great Lakes Model 2T-1 airplanes. The cracks developed along the welded portions of the upper mount bracket which end at the forward end of the tubular mount assembly. This cracking occurs in an area of the engine mount that may be difficult to visually inspect. If the engine mount is cracked, an operator may detect unusual vibration or contact between the starter and engine cowl. Further damage to the airplane may occur if these cracks are not repaired.

Recommendation - *Engine Mounts*
The FAA recommends that you visually inspect the entire engine mount every six months paying particular attention to welded areas. If any cracking is found, you should remove the engine mount and repair prior to further flight.

For further information, contact
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